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APPLICATION NO.	FILING DATE FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/826,148	04/05/2001	Claude Le Dantec	1807.1647	1807.1647 3994	
5514 7	590 09/22/2004		EXAMINER		
FITZPATRIC 30 ROCKEFE	CK CELLA HARPER &	WILLIAMS, LAWRENCE B			
NEW YORK,		ART UNIT	PAPER NUMBER		
			2634		
			DATE MAILED: 09/22/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Applicat	on No.	Applicant(s)				
		09/826,1	48	LE DANTEC, CLAUDE				
		Examine	r	Art Unit				
			B Williams	2634				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed	on <i>05 April 2001</i> .						
2a)□	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.							
3)⊠	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
5)⊠ 6)□ 7)⊠								
Applicat	ion Papers							
10)⊠	The specification is objected to by the The drawing(s) filed on <u>05 April 2001</u> is Applicant may not request that any objection Replacement drawing sheet(s) including the The oath or declaration is objected to be	s/are: a)⊠ accept on to the drawing(s) ne correction is requi	be held in abeyance. See red if the drawing(s) is ob	e 37 CFR 1.85(a). lected to. See 37 CFI				
Priority :	under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All   b) □ Some * c) □ None of:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
Attachmen			_					
1) Notice of References Cited (PTO-892)  A) Interview Summary (PTO-413)  Paper No(s)/Mail Date								
3) 🛛 Infor	mation Disclosure Statement(s) (PTO-1449 or PT er No(s)/Mail Date <u>2</u> .			atent Application (PTO-	-152)			

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#### **DETAILED ACTION**

### **Specification**

1. The abstract of the disclosure is objected to because: Examiner suggests applicant delete the last line: Fig. 5.

Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities: Examiner suggest applicant rewrite line 20 beginning with "The duration..." on page 3 for clarification.

Appropriate correction is required.

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### Claim Objections

1. Claim 7 is objected to because of the following informalities: Applicant's claim 7 recites the limitation "interleaving **the** parity sequence ( $\underline{v}_1$ ). Examiner suggests applicant use "interleaving a parity sequence ( $\underline{v}_1$ ) since this is the first introduction of the subject matter. Appropriate correction is required.

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Claim 14 is objected to because of the following informalities: Applicant's claim 14 recites the limitation "interleaving **the** parity sequence ( $\underline{v}_1$ ). Examiner suggests applicant use "interleaving **a** parity sequence ( $\underline{v}_1$ ) since this is the first introduction of the subject matter.

Appropriate correction is required.

3. Claim 27 is objected to because of the following informalities: Examiner suggests

applicant spell out the acronym ATM in line 2.

Appropriate correction is required.

4. Claim 28 is objected to because of the following informalities: Examiner suggests

applicant spell out the acronym IP in line 2.

Appropriate correction is required.

## Allowable Subject Matter

- 5. Claims 1-6, 8-13, and 15-34 are allowed.
- 6. Claims 7 and 14 are objected to but would be allowable if rewritten to overcome the

objections cited above.

7. The following is a statement of reasons for the indication of allowable subject matter:

The instant application discloses a method and device for encoding a source sequence of

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symbols. A thorough search of prior art record has failed to disclose a method or device whereby "a second operation is performed of division into sub-sequences and encoding, consisting of dividing said interleaved sequence ( $\underline{\mathbf{u}}^*$ ) into  $\mathbf{p}_2$  second sub-sequences ( $\underline{\mathbf{U}}'_j$ ),  $\mathbf{p}_2$  being a positive integer, and encoding each of said second sub-sequences ( $\underline{\mathbf{U}}'_j$ ) by means of a second circular convolutional encoding method (encoder, 20), at least one of the integers  $\mathbf{p}_1$  and  $\mathbf{p}_2$  being strictly greater than 1 and at least one of said first sub-sequences ( $\underline{\mathbf{U}}_j$ ), not being interleaved into any of said second sub-sequences ( $\underline{\mathbf{U}}'_j$ ) " along with the remaining limitations of independent claims 1 and 8. greater than 1 and at least one of said first sub-sequences ( $\underline{\mathbf{U}}_j$ ), not being interleaved into any of said second sub-sequences ( $\underline{\mathbf{U}}'_j$ ) " along with the remaining limitations of independent claims 1 and 8.

#### Conclusion

- 8. This application is in condition for allowance except for the following formal matters:
  - a.) Specification objections as noted above.
  - b.) Claim objections as noted above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte*Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

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9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037.

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The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

1bw

September 15, 2004

STEPHEN CHIN

SUPERVISORY PATENT EXAMINE

TECHNOLOGY CENTER 2800